

Master in Artificial Intelligence



Feature Engineering VI





Purpose

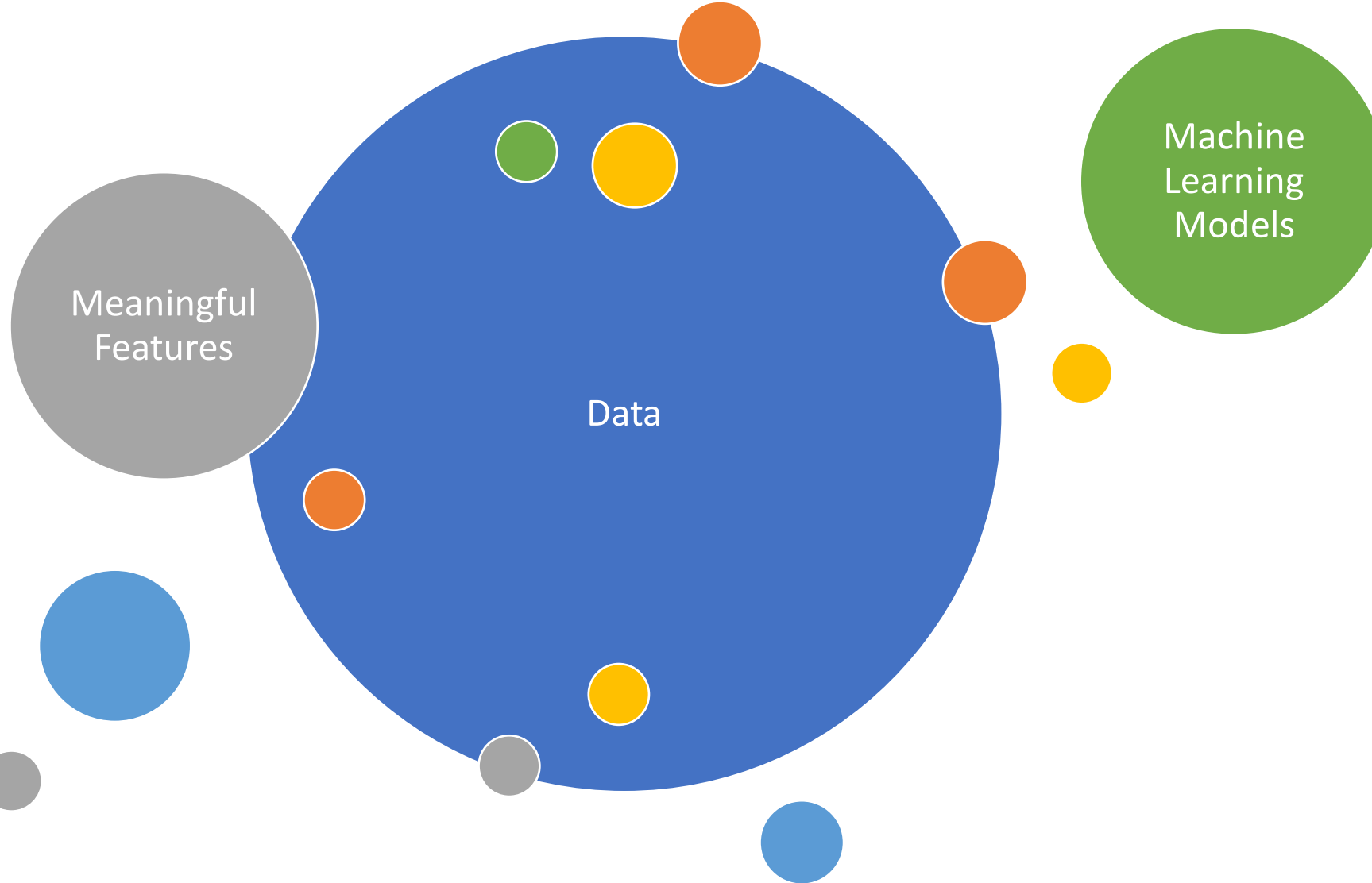
The purpose of the section is to help you learn how to identify and extract meaningful features from the data to become a Successful Artificial Intelligence (AI) Engineer

At the end of this lecture, you will learn the following

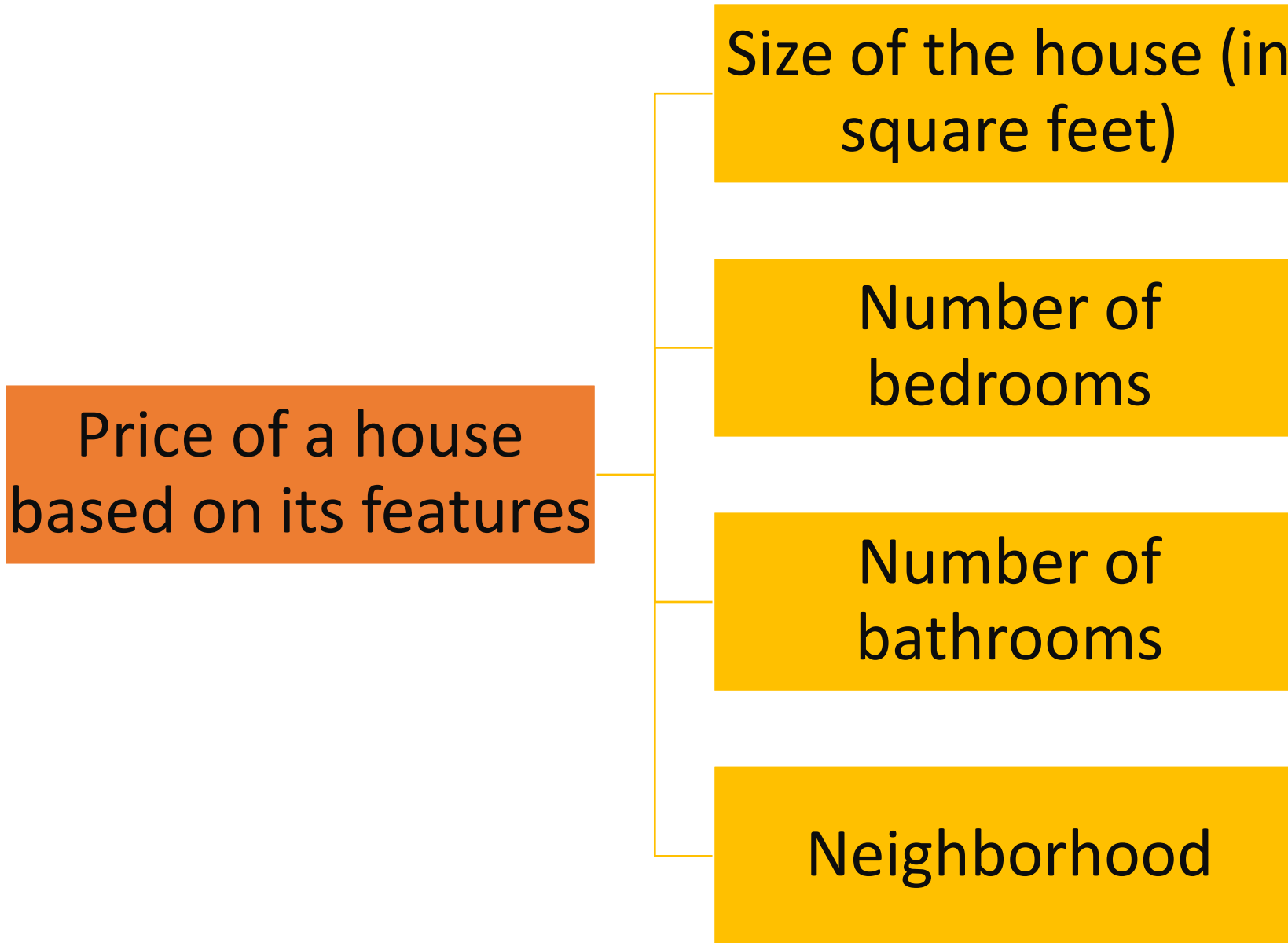
An example of identifying and extracting meaningful features from a dataset to improve the performance of a machine learning model



An example of how to identify and extract meaningful features from the data



An example of how to identify and extract meaningful features from the data



Started with Feature Engineering

Created a new feature to represent the total area of the property



Calculated the price per square foot of the house



Create a feature representing the age of the house



Encode categorical neighborhood information



Created interaction features such as the product of the number of bedrooms



Generated polynomial features for numerical features



Data Preprocessing

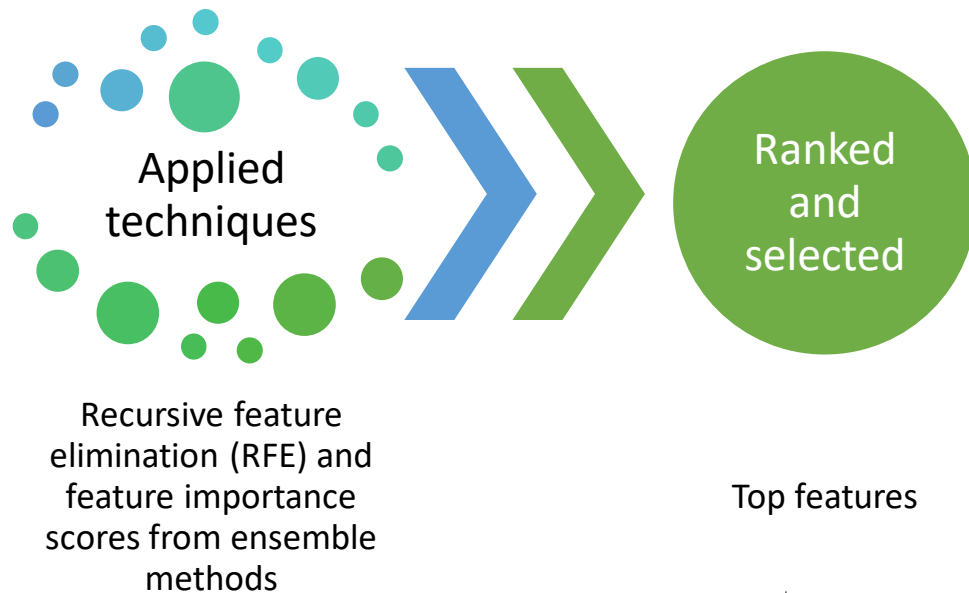
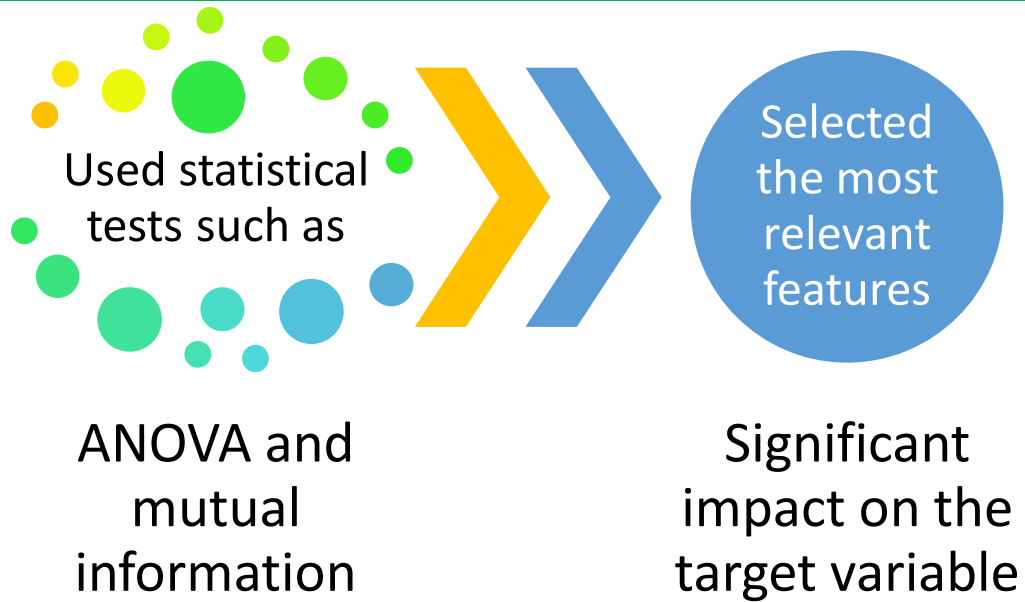
Handled
missing
values

Scaled
numerical
features

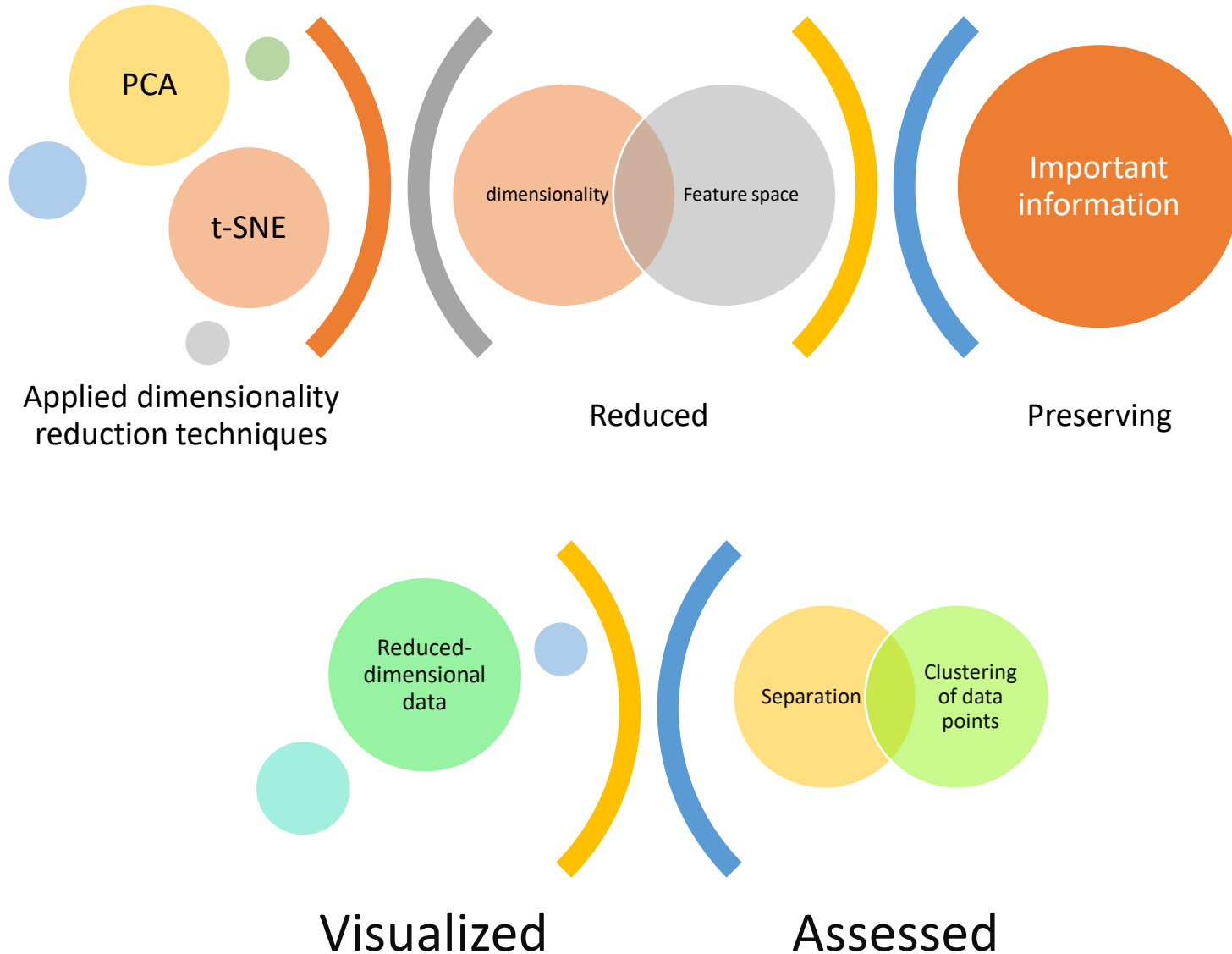
Encoded
categorical
variables



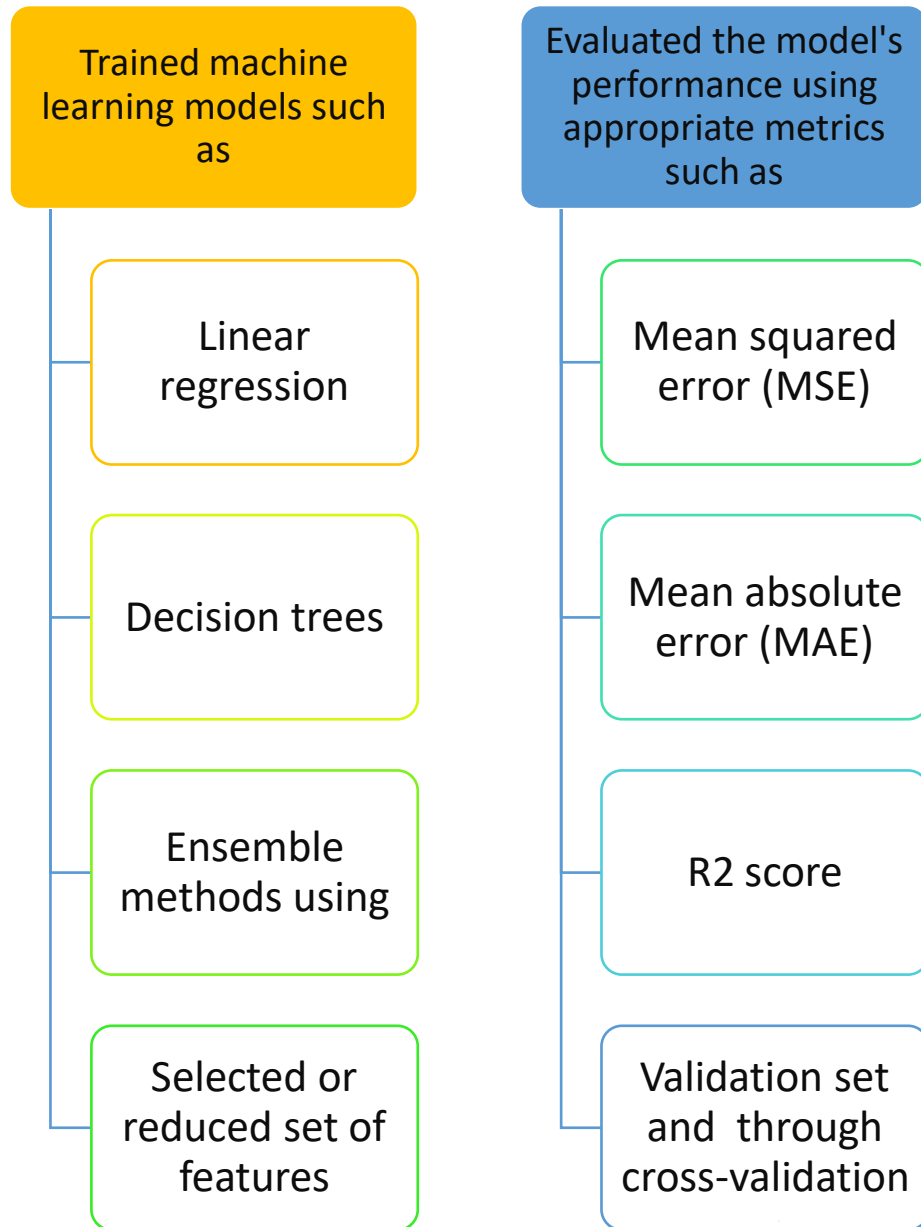
Feature Selection



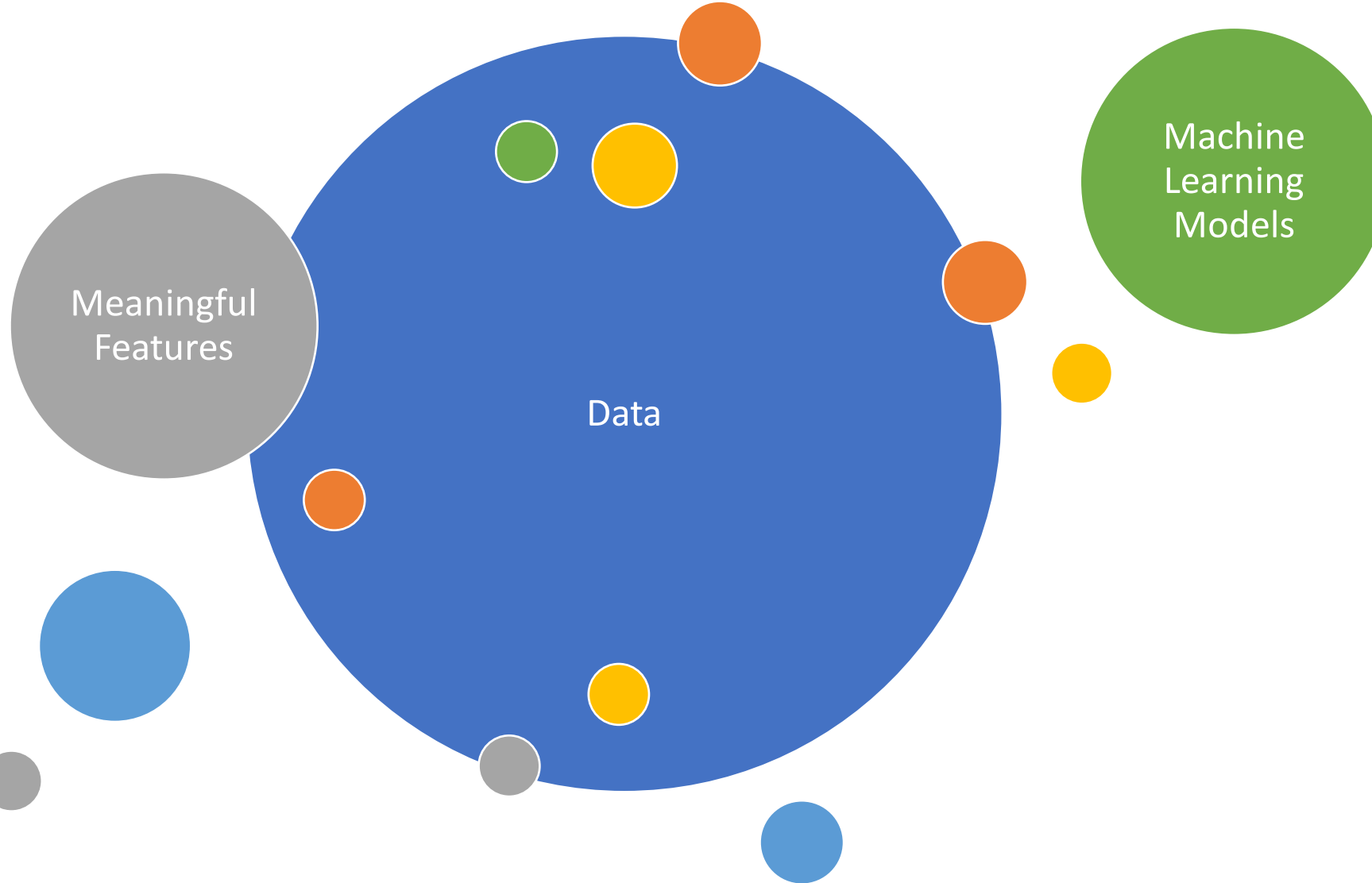
Dimensionality Reduction



Model Training and Evaluation

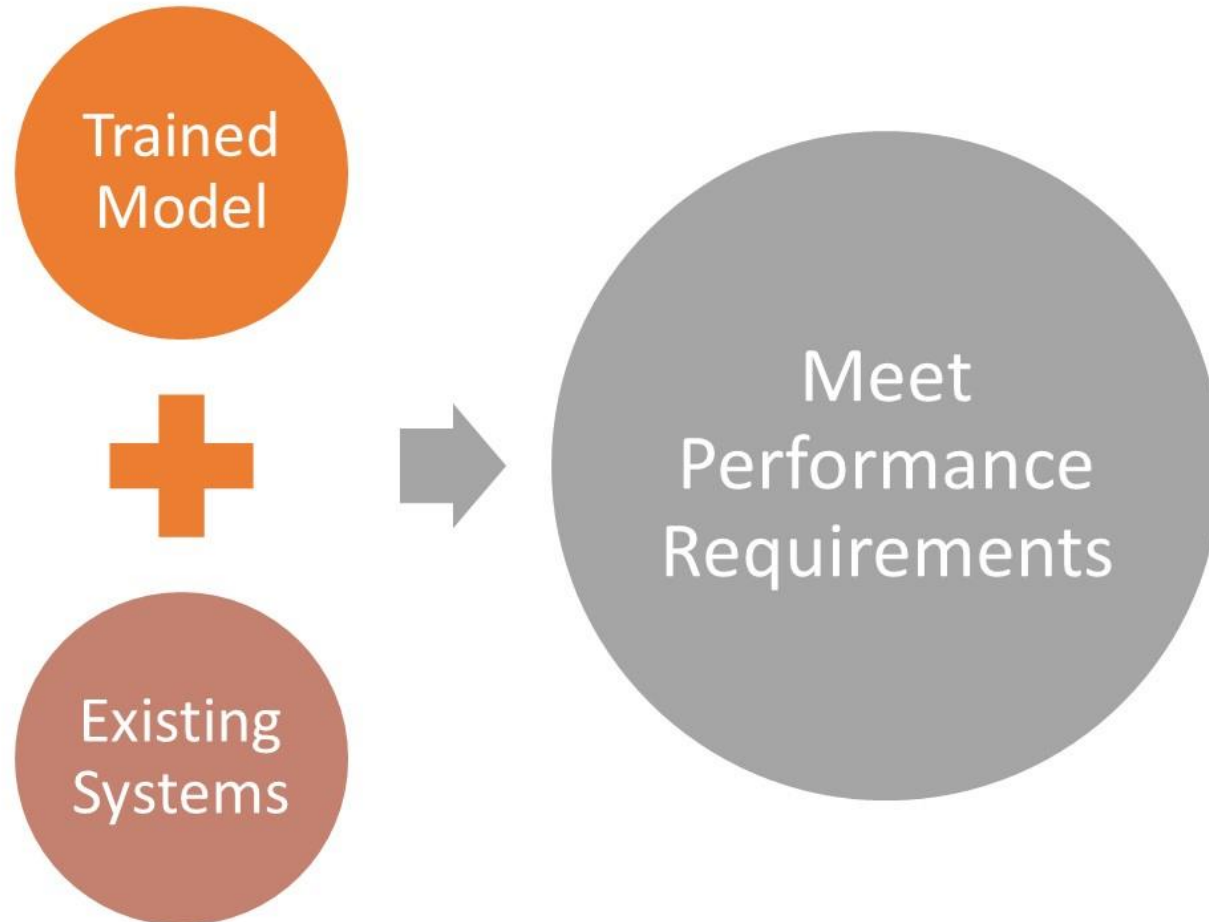


An example of how to identify and extract meaningful features from the data



What is next?

Deployment



Master in Artificial Intelligence

*Thank
you*



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